Design of an Efficient Solar Engine Circuit for Autonomous Robotics

Abstract

The project here is a creation of a solar light following and an obstacle avoiding robot without the use of any complex units like microcontrollers. The control circuit of the robot is designed making use of analog and digital properties of NAND and NOR CMOS IC’s. The robot is powered by solar cells and uses power in microwatts for its functioning, making it very efficient in terms of energy. It follows a bumblebee way of locomotion, making it very effective in obstacle aversion. It is seen that this robot is more efficient than any other solar light follower available currently.
- Brain o. berg, BEAM wiki, online journal, 2004.

**Index Terms**

Computer Science       Robotics

**Key words**

Pulsating trigger       solar engine       micro power circuit analysis

and design